



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,422	09/30/2003	Shou-Te Yu	YUSH3008/EM	2696

23364 7590 02/28/2005

BACON & THOMAS, PLLC
625 SLATERS LANE
FOURTH FLOOR
ALEXANDRIA, VA 22314

EXAMINER

COLON SANTANA, EDUARDO

ART UNIT	PAPER NUMBER
----------	--------------

2837

DATE MAILED: 02/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

14A

Office Action Summary	Application No. 10/673,422	Applicant(s) YU, SHOU-TE	
	Examiner Eduardo Colon-Santana	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Canon U.S. Patent No. 5,099,181.

Referring to claims 1 and 9, Canon describes a pulse-width modulation speed controllable DC brushless motor fan (see the figures and respective portions of the specifications). Canon further discloses in figure 2 a motor driving circuit, which depicts power supply terminal (+ -), a voltage stabilizing, and driving elements for the two fan motor coils (L1, L2). Furthermore, Canon discloses the power supply providing input supply voltage to a zener diode (ZD1 or ZD2), which are voltage stabilizing elements and part of a voltage stabilizing circuit to produce a constant voltage to a driving element including an integrated circuit IC1. Figure 2, depicts a signal generating circuit including a resistor (RT) and capacitor (C2) (RC circuit) wherein a signal is input to an integrated circuit IC3 after being generated in response to a voltage level inputted by the power supply (high or low) and the temperature measured by the RT resistor and wherein this voltage (Vc) is being compared with a constant

Art Unit: 2837

voltage (V_{th}) provided by the stabilizing circuit of resistor (R_3) and zener diode (ZD_2). This comparison signal provided by the integrated (IC_3) through port (O/P) to the drive element (IC_1) is subject to the control of resistor (R_T) and Capacitor C_2 in consistency with the voltage supplied from the power supply to thereby control the rotation speed of the fan motor. (See Col. 1-4 and figures 2-3J).

As to claims 2-4 and 10-12, Canon discloses voltage-stabilizing circuit being a voltage stabilizer and having a Zener diode (ZD_2) as a voltage-stabilizing element.

Referring to claims 5 and 13, Canon discloses a resistor-capacitor (RC) circuit as a signal-generating unit.

As to claims 6 and 14, although Canon et al. does not explicitly describes having an oscillator, one having ordinary skill would have recognize that a voltage oscillator exist between the back to back diodes (D_2 , D_3) normally called a varactor diode and the integrated circuit (IC_1), wherein a dc voltage applied to the varactor diode by means of a stabilizing element (ZD_1) and switches (\emptyset_1 and \emptyset_2) varies the net capacitance applied to the circuit through a frequency selective component C_1).

As to claims 7 and 15, Canon mentions the use of capacitor C_1 for setting a frequency level of the input signal.

Referring to claims 8 and 16, Canon discloses a hall element (IC_2) in figure 2.

Conclusion

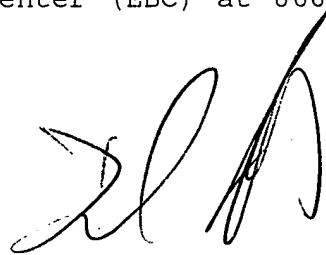
2. The prior art made of record in form 892 and not specifically relied upon is considered pertinent to applicant's disclosure to further show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eduardo Colon-Santana whose telephone number is (571) 272-2060. The examiner can normally be reached on Monday thru Thursday 6:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Martin can be reached on (571) 272-2800 X.37. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ECS
February 10, 2005



DAVID MARTIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800